of other electrical interfaces with suitable response times, such as the Apple Desktop Bus, and the corresponding connectors for those interfaces will be apparent to those skilled in the art.

Furthermore as shown in FIG. **2**, the mounting bracket **152** is formed as a slightly tapered cylinder to provide a wedge to open the retractable collar **117** and to allow the collar **117** to ride up on the bracket **152** until the collar **117** snaps into a groove **154** formed in the bracket **152**. In addition, the tapered cylinder is keyed to match the receptacle opening in the lap top case so that only one orientation of the joystick with respect to the lap-top is possible. This ensures that correct electrical connection will be made. The groove **154** and collar **117** are square in one embodiment so that forces applied to the joystick will not force the collar **117** out of the groove. In another embodiment, the groove **154** and collar **117** are slightly rounded so that excessive force, which might otherwise damage the joystick or laptop case, causes release of the joystick. The interlocking of the groove **154** and the collar **117** prevents the joystick from moving in the hole **114** vertically, and the tension created by the bracket **152** pressing the segments of the collar **117** open against the biasing springs locks the joystick **150** into place laterally.

In a further embodiment, the collar **117** comprises a plurality of overlapping pie-shaped segments having blunt tips formed to fit into the groove in the mounting bracket. A plurality of springs is coupled to the plurality of segments so that the plurality of segments form a solid circle when the springs are unbiased. When the joystick is locked into place laterally within the receptacle by the plurality of segments, the springs are biased by the mounting bracket **152** pressing against the plurality of segments. In this embodiment, four segments provide the retentive force required to provide a stable base for the joystick **150**. In yet a further embodiment, the receptacle and bracket are square or rectangular in shape. Other shapes, such as triangles and various star shapes will be apparent to those skilled in the art. Such shapes will also provide suitable keying to ensure proper orientation of the joystick.

Other mechanisms for attaching and detaching the joystick **150** from the lap-top **110**, and alternate locations for those mechanisms, will be apparent to those skilled in the art, as will the use of alternate materials and manufacturing methods for making the computer case **111** and the joystick mounting bracket **152**. In a further embodiment, a plurality of spring biased small cylinders **156** and **157** shown detached from and in place of the collar **117** in the receptacle, with corresponding cylindrical openings **160** and **162** being provided on the mounting bracket as shown in FIG. **3**. Further cylinders, or retractable protrusions **158** and **159** mate with cylindrical openings on the non-visible side of the joystick mounting bracket. Vertical grooves **164** and **166** are formed in the mounting bracket to guide the cylinders **156** and **157** into the opening during insertion. To ensure that correct electrical connection is made, the rods and vertical grooves are positioned so that the joystick may be inserted in only one orientation. To release the joystick, a button on the base of the joystick is coupled to rods which simply push the cylinders out of the cylindrical openings, whereupon the joystick is lifted out of the lap-top. The same type of release mechanism is used in a further embodiment having the segments shown in FIG. **1**. In yet a further embodiment, the small cylinders are reversed, such that the mounting bracket has the openings, and the receptacle has the rods. There is no requirement that the protrusions or rods be cylidrical. Other shapes, such as half cylinder or square will be apparent to those skilled in the art.

It is to be understood that the above description is intended to be illustrative, and not restrictive. Many other embodiments will be apparent to those of skill in the art upon reviewing the above description. The scope of the invention should, therefore, be determined with reference to the appended claims, along with the full scope of equivalents to which such claims are entitled.

What is claimed is:

1. A computer system comprising:

a joystick;

a portable computer having a case with a palm rest formed thereon;

a mounting bracket coupled to the joystick for detachably affixing the joystick to the portable computer;

a receptacle formed in the palm rest of the portable computer to fit the mounting bracket;

a locking mechanism for providing a secure and stable base for the joystick when the mounting bracket is coupled to the receptacle; and

an electrical connection between the portable computer and the joystick for relaying electrical signals generated by the joystick to the portable computer.

2. The computer system as in claim **1**, wherein:

the electrical connection comprises:

at least one electrical contact coupled to the mounting bracket for transmitting the electrical signals generated by the joystick; and

at least one electrical contact positioned within the receptacle to mate with the corresponding electrical contact on the mounting bracket for receiving the electrical signals generated by the joystick.

3. The computer system as in claim **2**, wherein the locking mechanism comprises:

a retractable collar positioned within the receptacle, formed to fit around the mounting bracket of the joystick and to automatically lock the joystick in place when the mounting bracket is coupled to the receptacle.

4. The computer system as in claim **3**, wherein:

the receptacle is a cylindrical hole; and

the mounting bracket comprises:

a slightly tapered cylinder having a narrow end opposite the joystick which fits within the open the retractable collar and provides a surface to allow the collar to ride up on the bracket during insertion into the hole; and

a circumferential groove formed in the cylinder so that the retractable collar snaps into the groove and prevents the mounting bracket from moving in the receptacle vertically.

5. The computer system as in claim **4**, wherein the retractable collar comprises:

a plurality of overlapping pie-shaped segments having blunt tips formed to fit into the groove in the mounting bracket;

a plurality of springs coupled to the plurality of segments so that the plurality of segments form a solid circle when the plurality of springs are unbiased and so that the joystick is locked into place laterally within the receptacle by the plurality of segments when the plurality of springs are biased by the mounting bracket pressing against the plurality of segments.

6. The computer system as in claim **2**, wherein the locking mechanism comprises:

a plurality of retractable protruding members positioned within the receptacle; and